

Cricketfilter® with wet cake discharge

1. Introduction

The Cricketfilter® is a pressure filter with a large specific filtration area due to the shape of the filter elements. The Cricketfilter® is unique because of its patented filter elements, which allow discharge of the filter cake by back pulsing.



2. Description

The Cricketfilter® was introduced successfully into industry in 1990. The Cricketfilter® is used for direct filtration and for precoat / body-aid filtration. Direct filtration is often possible because of the use of filter cloths. In some applications no filter aid is needed. This results in even more economical filtration. During precoat / body-aid filtration the Cricketfilter® is first precoated with a suitable filter aid. During filtration some filter aid is added into the feed to keep a high filtration capacity during a long cycle time. At the end of the filtration cycle the cake slurry is discharged through a bottom valve.

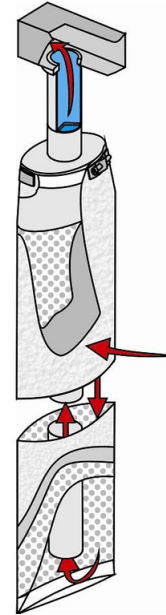
4. Standard design data

Material tank	: carbon steel or stainless steel
Material filter elements	: stainless steel
Design pressure	: -1 to 6 bar (g)
Design temperature	: -10 to 150 °C (depending on filter cloth)
Max. allowable pressure drop	: 4.5 bar
Design	: AD-2000 and others upon request
Approval	: PED 97/23/EC SELO 02257 (China) GOST R (Russia) and others upon request

3. Cricketfilter® system advantages

The Cricketfilter®, which can be fully automated, produces a high filtrate clarity. Elements are mounted on internal filtrate manifolds. Cake release by backpulsing with air is done for manifolds individually, which results in an effective backpulse. No extra liquid is needed. During the short regeneration time the filter medium is cleaned intensively.

The filter element spacing and the filter cloth are selected to suit the filtration needs of the application. The filters are as standard equipped with a cover lift assembly. The Cricketfilter® itself has no rotating parts, keeping maintenance to a minimum.



5. Specifications

Type	Filter area [m²]	Element length [mm]	Element spacing [mm]	Cake volume [dm³]	Filter volume [dm³]	Inlet/ outlet DN [mm]	Filtrate outlet DN [mm]	Vent DN [mm]	Cake discharge DN [mm]
Small element spacing									
800W-11/1000-58	11	1000	58.0	140	870	50	2x50	65	100
800W-16/1500-58	16	1500	58.0	210	1110	50	2x50	65	100
1000W-27/1500-58	27	1500	58.0	350	1810	65	4x50	65	150
1200W-42/1500-58	42	1500	58.0	540	2750	100	4x50	65	200
1200W-35/1500-68	35	1500	67.5	520	2750	100	4x50	100	200
1200W-58/2500-68	58	2500	67.5	870	3870	100	5x80	100	200
1400W-78/2500-68	78	2500	67.5	1170	5420	150	5x80	100	200
1600W-108/2500-68	108	2500	67.5	1610	7280	150	6x80	150	250
1800W-139/2500-68	139	2500	67.5	2090	9400	150	6x100	150	250
2000W-180/2500-68	180	2500	67.5	2710	11900	200	7x100	150	300
2200W-222/2500-68	222	2500	67.5	3340	14720	200	9x100	150	300
2400W-272/2500-68	272	2500	67.5	4080	17920	200	9x100	150	200

5. Specifications (continued)

Type	Filter area [m ²]	Element length [mm]	Element spacing [mm]	Cake volume [dm ³]	Filter volume [dm ³]	Inlet/ outlet DN [mm]	Filtrate outlet DN [mm]	Vent DN [mm]	Cake discharge DN [mm]
Medium element spacing									
800W-7.4/1000-80	7.4	1000	80	150	870	50	2x50	50	100
800W-11/1500-80	11.0	1500	80	220	1110	50	2x50	50	100
1000W-19/1500-80	19.0	1500	80	370	1810	65	3x50	65	150
1200W-26/1500-90	26.0	1500	90	580	2750	100	3x65	80	200
1200W-44/2500-90	44.0	1500	90	960	3870	100	3x65	80	200
1400W-62/2500-90	62.0	2500	90	1370	5420	100	4x65	100	200
1600W-81/2500-90	81.0	2500	90	1770	7280	150	5x80	100	200
1800W-105/2500-90	105.0	2500	90	2310	9400	150	5x100	150	250
2000W-137/2500-90	137.0	2500	90	3020	11900	150	6x100	150	250
2200W-169/2500-90	169.0	2500	90	3720	14720	200	7x100	150	300
2400W-208/2500-90	208.0	2500	90	4580	17920	200	8x100	150	300
Large element spacing									
1200W-22/1500-110	22	1500	110	640	2750	80	3x65	80	200
1200W-37/2500-110	37	2500	110	1070	3870	80	3x65	80	200
1400W-29/1500-110	29	1500	110	850	5420	100	3x65	100	200
1400W-49/2500-110	49	2500	110	1420	5420	100	3x65	100	200
1600W-69/2500-110	69	2500	110	2000	7280	150	4x80	100	250
1800W-90/2500-110	90	2500	110	2610	9400	150	5x100	150	250
2000W-109/2500-110	109	2500	110	3170	11900	150	5x100	150	300
2200W-138/2500-110	138	2500	110	4010	14720	150	7x100	150	300
2400W-170-2500/110	170	2500	110	4920	17920	200	7x100	150	300

Other types on request.

Notes: Dimensions are for reference only. Subject to technical alteration without prior notice.

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